

The Redesigned SAT[®]

Results from the Pilot Predictive Validity Study

The redesigned SAT[®] covers the content and skills that research shows matter most for college readiness — and it remains as predictive of college success as the current SAT.

VALIDITY STUDY KEY FINDINGS

- The redesigned SAT covers the content and skills that research shows matter most for college readiness — and it remains as predictive of college success as the current SAT.
- Redesigned SAT scores improve the ability to predict college performance above high school GPA alone.
- There is a strong, positive relationship between redesigned SAT scores and grades in matching college course domains, suggesting that the redesigned SAT is sensitive to instruction in English language arts, math, science, and history/social studies.

Background and Purpose

As part of the redesign of the SAT, the College Board conducted a pilot study to examine the predictive validity of redesigned SAT scores with college outcomes. Complete study results will be available online as a research report in early 2016.

Fifteen four-year institutions administered a pilot form of the redesigned SAT to a sample of first-year, first-time students early in the fall semester of 2014. In total, 2,050 students were included in this sample. Measures were taken to ensure that the redesigned SAT was administered to students under standardized conditions and that students were motivated to perform well on the test.

Participating institutions provided the College Board with these students' first-year performance data in June 2015, allowing the College Board to analyze the relationships between SAT scores and college performance.

Relationship Between the Redesigned SAT Scores and First-Year GPA

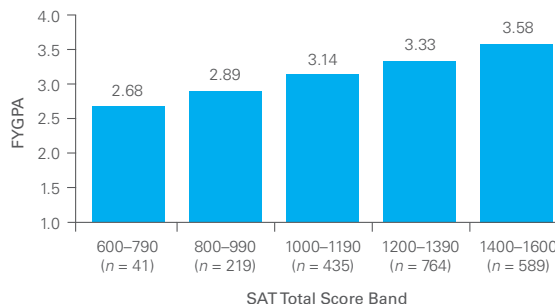
Correlations^{1,2} were computed between the different SAT scores (Evidence-Based Reading and Writing [EBRW] section score, Math section score), HSGPA, and FYGPA (see Table 1). Figure 1 shows that as the SAT score bands increase, so does the mean FYGPA.

Table 1. Correlations of Predictors with FYGPA

PREDICTOR(S)	CORRELATION(S)
HSGPA	0.48 (0.27)
SAT EBRW Section score	0.51 (0.33)
SAT Math Section score	0.49 (0.30)
SAT EBRW, SAT Math	0.53 (0.35)
HSGPA, SAT EBRW, SAT Math	0.58 (0.40)

Note: Number of students (n) = 2,050. Pooled within-institution, restriction of range corrected correlations are presented. The raw correlations are shown in parentheses.

Figure 1. Mean FYGPA by SAT Total Score Band

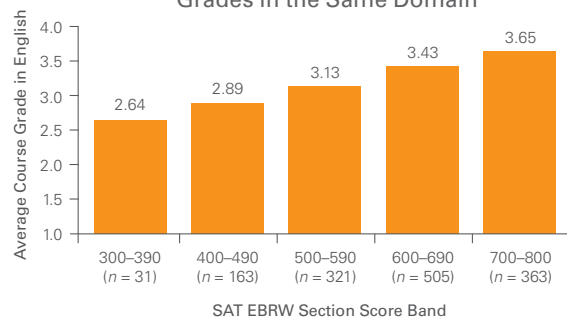


Note: Results based on fewer than 15 cases are not reported (e.g., score band 400-590, n = 2).

Relationship Between Redesigned SAT Section Scores and College Course Grades

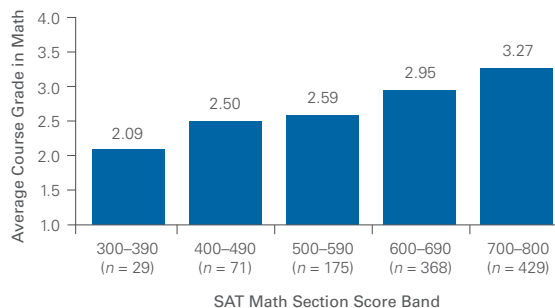
The study also examined the relationship between the redesigned SAT section scores and the average college first-semester course grades in the matching academic domain. The following graphs show a strong, positive relationship between SAT section scores and grades in matching college courses.

Figure 2. Relationship Between SAT Evidence-Based Reading and Writing Section Scores and Course Grades in the Same Domain



Note: Results based on fewer than 15 cases are not reported (e.g., score band 200-290, n = 1). Average English course grade includes first-semester college courses that are reading- and writing-intensive (excluding foreign and classical languages).

Figure 3. Relationship Between SAT Math Section Scores and Course Grades in the Same Domain



Note: Results based on fewer than 15 cases are not reported (e.g., score band 200-290, n = 1). Average math course grade includes first-semester course work in algebra, precalculus, calculus, and statistics.

Next Steps

After the first administration of the redesigned SAT in March 2016, the College Board will launch a more comprehensive, longitudinal national SAT Validity Study in partnership with colleges and universities to examine the relationship between SAT scores and important college outcomes such as GPA, course grades, persistence, and completion. Initial findings from this large-scale study will be available in 2019.

For institutions interested in participating in the upcoming national validity study of the redesigned SAT, please contact nsatvastudy@collegeboard.org prior to September 2018.

Learn more about the predictive power of the SAT at collegereadiness.collegeboard.org.

1. An often-cited rule of thumb for interpreting correlation coefficients is that a small correlation has an absolute value of approximately .10; a medium correlation has an absolute value of approximately .30; and a large correlation has an absolute value of approximately .50 or higher. From Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

2. Both raw and corrected correlations are presented. Correlations were corrected for restriction of range using the Pearson-Lawley multivariate correction with the 2014 College-Bound Seniors Cohort as the population. Note that it is a widely accepted practice to statistically correct correlation coefficients for restriction of range since only a sample (admitted/enrolled students) is available for analysis as opposed to the population (all applicants) for which the measure (SAT) was used to make decisions.